

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 21 NOV 2005

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Applicant's or agent's file reference 728439	<b>FOR FURTHER ACTION</b>		See Form PCT/IPEA/416
International application No. <b>PCT/SG2004/000307</b>	International filing date (day/month/year) 21 September 2004	Priority date (day/month/year) 22 September 2003	
International Patent Classification (IPC) or national classification and IPC  Int. Cl. <sup>7</sup> C07D 235/06, 235/26; A61K 31/4184			
Applicant  S*BIO PTE LTD et al			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☒ (sent to the applicant and to the International Bureau) a total of 8 sheets, as follows:

☒ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or table related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand 18 July 2005	Date of completion of the report 3 November 2005
Name and mailing address of the IPEA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaaustralia.gov.au Facsimile No. (02) 6285 3929	Authorized Officer  <b>GEORGE D. HEARDER</b> Telephone No. (02) 6283 2553

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SG2004/000307

**Box No. I**      **Basis of the report**

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:

☐ international search (under Rules 12.3 and 23.1 (b))

☐ publication of the international application (under Rule 12.4)

☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

☐ the international application as originally filed/furnished

☒ the description:

pages 1-5, 7-9, 11-13, 15-26, 28-110 as originally filed/furnished

pages\* 6, 10, 14, 27 received by this Authority on 18 July 2005 with the letter of 14 July 2005

pages\* received by this Authority on with the letter of

☒ the claims:

pages 111-113, 116-122, 125-136 as originally filed/furnished

pages\* as amended (together with any statement) under Article 19

pages\* 114, 115 received by this Authority on 18 July 2005 with the letter of 14 July 2005

pages\* 123, 124 received by this Authority on 27 October 2005 with the letter of 25 October

2005

☐ the drawings:

pages as originally filed/furnished

pages\* received by this Authority on with the letter of

pages\* received by this Authority on with the letter of

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

☐ the description, pages

☐ the claims, Nos.

☐ the drawings, sheets/figs

☐ the sequence listing (*specify*):

☐ any table(s) related to the sequence listing (*specify*):

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/SG2004/000307

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims 1-42	YES
	Claims	NO
Inventive step (IS)	Claims 1-42	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-42	YES
	Claims	NO

## 2. Citations and explanations (Rule 70.7)

The following documents identified in the International Search Report have been considered for the purposes of this report:

D1 CA 136:131135  
D2 WO 2000/042022  
D3 WO 2003/077855  
D4 WO 2003/077914  
D5 WO 2003/087089  
D6 WO 2003/000682  
D7 WO 2003/000254  
D8 WO 2002/050062  
D9 WO 2001/047883  
D10 WO 2001/005390  
D11 WO 2001/012604  
D12 WO 2001/005393  
D13 WO 2001/000207  
D14 WO 2001/000213

Please refer to the International Search Report for a full listing of the cited documents and their classification with regard to their relevance to the claims searched.

Novelty (N)

The present invention relates to benzimidazole compounds substituted with hydroxamate derivatives via a linker. None of the listed prior art documents discloses the use of linkers, all the disclosed compounds having the hydroxamate moiety directly bound to the benzimidazole.

Therefore the subject matter of these claims is new and meets the requirements of Article 33(2) PCT with regard to novelty.

Inventive Step (IS)

The claimed invention is not obvious in the light of any of the cited documents nor is it disclosed in any obvious combination of them. It is also considered that it would not be obvious to a person skilled in the art in the light of common general knowledge either by itself or in combination with any of these documents.

Industrial Applicability (IA)

The invention defined in the claims is considered to meet the requirements of Industrial Applicability under Article 33(4) of the PCT.

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W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

5 d) L=L<sup>1</sup>-W-L<sup>2</sup>

L<sup>1</sup> and L<sup>2</sup> are the same or different and independently selected from C<sub>1</sub>-C<sub>5</sub> alkyl, which may be optionally substituted one or more substituents independently selected from the group consisting of: halogen; =O; =S; -CN; -NO<sub>2</sub>; -CF<sub>3</sub>, -OCF<sub>3</sub>, alkyl, alkoxy, acylamino, alkylamino;

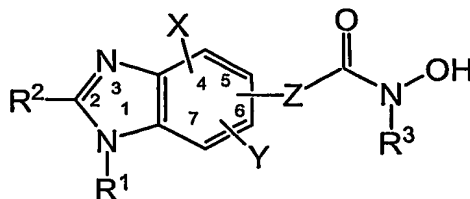
10 W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

R<sup>9</sup> and R<sup>10</sup> are the same or different and are independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>4</sub>-C<sub>9</sub> cycloalkyl, C<sub>4</sub>-C<sub>9</sub> heterocycloalkyl, aryl, heteroaryl, arylalkyl and  
15 heteroarylalkyl; and acyl;

Z is selected from -CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -CH=CH- and C<sub>3</sub>-C<sub>6</sub> cycloalkyl, unsubstituted or substituted with one or more substituents independently selected from the group consisting of C<sub>1</sub>-C<sub>4</sub> alkyl; or a pharmaceutically acceptable salt thereof.

One suitable genus of hydroxamic compounds are those of formula Ia:

20



Formula Ia

wherein

R<sup>1</sup> is selected from the group consisting of: H, alkyl, alkenyl, alkynyl, haloalkyl, haloalkenyl, heteroalkyl, cycloalkyl, cycloalkenyl, heterocycloalkyl, heterocycloalkenyl,  
25 aryl, heteroaryl, cycloalkylalkyl, heterocycloalkylalkyl, arylalkyl, heteroarylalkyl, arylalkenyl, cycloalkylheteroalkyl, arylheteroalkyl, heterocycloalkylheteroalkyl, heteroarylheteroalkyl, hydroxy, hydroxyalkyl, alkoxy, alkoxyalkyl, alkoxyaryl, alkenyloxy, alkynyloxy, cycloalkylkoxy, heterocycloalkyloxy, aryloxy, heteroaryloxy, arylalkyloxy, amino, alkylamino, aminoalkyl, acylamino, arylamino, phenoxy, benzyloxy, COOH,  
30 alkoxycarbonyl, alkylaminocarbonyl, sulfonyl, alkylsulfonyl, alkylsulfinyl, arylsulfonyl, arylsulfinyl, aminosulfonyl, SR<sup>6</sup> and acyl, each of which may be unsubstituted or

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W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

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d)  $L=L^1-W-L^2$

L<sup>1</sup> and L<sup>2</sup> are the same or different and independently selected from C<sub>1</sub>-C<sub>5</sub> alkyl, which may be optionally substituted one or more substituents independently selected from the group consisting of: halogen; =O; =S; -CN; -NO<sub>2</sub>; -CF<sub>3</sub>, -OCF<sub>3</sub>, alkyl, alkoxy, acylamino, alkylamino;

10

W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

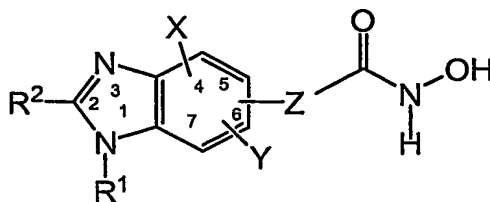
R<sup>9</sup> and R<sup>10</sup> are the same or different and are independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>4</sub>-C<sub>9</sub> cycloalkyl, C<sub>4</sub>-C<sub>9</sub> heterocycloalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl; and acyl;

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Z is selected from -CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -CH=CH-, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, unsubstituted or substituted with one or more substituents independently selected from the group consisting of C<sub>1</sub>-C<sub>4</sub> alkyl; or a pharmaceutically acceptable salt thereof.

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Another group of useful compounds are those of the formula Ib:



Formula Ib

wherein

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R<sup>1</sup> is selected from the group consisting of: H, alkyl, alkenyl, alkynyl, haloalkyl, haloalkenyl, heteroalkyl, cycloalkyl, cycloalkenyl, heterocycloalkyl, heterocycloalkenyl, aryl, heteroaryl, cycloalkylalkyl, heterocycloalkylalkyl, arylalkyl, heteroarylalkyl, arylalkenyl, cycloalkylheteroalkyl, arylheteroalkyl, heterocycloalkylheteroalkyl, heteroarylheteroalkyl, hydroxy, hydroxyalkyl, alkoxy, alkoxyalkyl, alkoxyaryl, alkenyloxy, alkynyloxy, cycloalkylkoxy, heterocycloalkyloxy, aryloxy, heteroaryloxy, arylalkyloxy, amino, alkylamino, aminoalkyl, acylamino, arylamino, phenoxy, benzyloxy, COOH, alkoxycarbonyl, alkylaminocarbonyl, sulfonyl, alkylsulfonyl, alkylsulfinyl, arylsulfonyl, arylsulfinyl, aminosulfonyl, SR<sup>6</sup> and acyl, each of which may be unsubstituted or

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14

W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

5 d)  $L=L^1-W-L^2$

L<sup>1</sup> and L<sup>2</sup> are the same or different and independently selected from C<sub>1</sub>-C<sub>5</sub> alkyl, which may be optionally substituted one or more substituents independently selected from the group consisting of: halogen; =O; =S; -CN; -NO<sub>2</sub>; -CF<sub>3</sub>, -OCF<sub>3</sub>, alkyl, alkoxy, acylamino, alkylamino;

10 W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

R<sup>9</sup> and R<sup>10</sup> are the same or different and are independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>4</sub>-C<sub>9</sub> cycloalkyl, C<sub>4</sub>-C<sub>9</sub> heterocycloalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl; and acyl;

Z is selected from -CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -CH=CH-, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, unsubstituted or substituted with one or more substituents independently selected from the group consisting of C<sub>1</sub>-C<sub>4</sub> alkyl; or a pharmaceutically acceptable salt thereof.

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As with any group of structurally related compounds which possess a particular utility, certain groups are preferred for the compounds of the Formula (I), (Ia) and (Ib) in their end use application.

25 In certain preferred embodiments R<sup>1</sup> is selected from the group consisting of C<sub>1</sub>-C<sub>10</sub> alkyl, alkenyl, heteroalkyl, haloalkyl, alkynyl, aryl, cycloalkyl, heterocycloalkyl, heteroaryl, C<sub>4</sub>-C<sub>9</sub> heterocycloalkylalkyl, cycloalkylalkyl, arylalkyl, and heteroarylalkyl each of which may be substituted as previously stated.

30 In another embodiment it is preferred that R<sup>1</sup> is selected from the group consisting of H, hydroxyalkyl, alkyl, arylalkyl, heteroarylalkyl, alkoxyalkyl, aminoalkyl, and heterocycloalkyl each of which may be substituted as previously stated.

In another embodiment it is preferred that R<sup>1</sup> is selected from the group consisting of H, hydroxyalkyl, alkyl, alkoxyalkyl, and aminoalkyl each of which may be substituted as previously stated.

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c)  $L = \text{Cy}-(\text{CH}_2)_m-\text{W}-$

Wherein,

Cy is  $\text{C}_1\text{-C}_{15}$  alkyl, aminoalkyl, heterocycloalkyl, cycloalkyl, aryl, aryloxy or heteroaryl, any of which may be optionally substituted one or more substituents independently selected from the group consisting of: halogen, =O, =S, -CN, -NO<sub>2</sub>, -CF<sub>3</sub>, -OCF<sub>3</sub>, alkyl, alkenyl, alkynyl, haloalkyl, haloalkenyl, haloalkynyl, heteroalkyl, cycloalkyl, cycloalkenyl, heterocycloalkyl, heterocycloalkenyl, aryl, heteroaryl, hydroxy, hydroxyalkyl, alkoxy, alkoxyalkyl, alkoxyaryl, alkoxyheteroaryl, alkenyloxy, alkynyloxy, cycloalkyloxy, cycloalkenyloxy, heterocycloalkyloxy, heterocycloalkenyloxy, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, arylalkyloxy, amino, alkylamino, acylamino, aminoalkyl, arylamino, sulfonyl, alkylsulfonyl, arylsulfonyl, aminosulfonyl, aminoalkyl, alkoxyalkyl, -COOH, C(O)OR<sup>8</sup>, -COR<sup>5</sup>, -SH, -SR<sup>6</sup>, -OR<sup>6</sup> and acyl;

m is 0, 1, 2, 3, 4 or 5;

W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

d)  $L = \text{L}^1-\text{W}-\text{L}^2$

L<sup>1</sup> and L<sup>2</sup> are the same or different and independently selected from  $\text{C}_1\text{-C}_5$  alkyl, which may be optionally substituted one or more substituents independently selected from the group consisting of: halogen; =O; =S; -CN; -NO<sub>2</sub>; -CF<sub>3</sub>, -OCF<sub>3</sub>, alkyl, alkoxy, acylamino, alkylamino;

W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

R<sup>9</sup> and R<sup>10</sup> are the same or different and are independently selected from H,  $\text{C}_1\text{-C}_6$  alkyl,  $\text{C}_4\text{-C}_9$  cycloalkyl,  $\text{C}_4\text{-C}_9$  heterocycloalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl; and acyl;

Z is selected from -CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -CH=CH-,  $\text{C}_3\text{-C}_6$  cycloalkyl, unsubstituted or substituted with one or more substituents independently selected from the group consisting of  $\text{C}_1\text{-C}_4$  alkyl;

or a pharmaceutically acceptable salt thereof.

As used herein, the term unsubstituted means that there is no substituent or that the only substituents are hydrogen.

W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

c) L=Cy-(CH<sub>2</sub>)<sub>m</sub>-W-

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Wherein,

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Cy is C<sub>1</sub>-C<sub>15</sub> alkyl, aminoalkyl, heterocycloalkyl, cycloalkyl, aryl, aryloxy or heteroaryl any of which may be optionally substituted one or more substituents independently selected from the group consisting of: halogen, =O, =S, -CN, -NO<sub>2</sub>, -CF<sub>3</sub>, -OCF<sub>3</sub>, alkyl, alkenyl, alkynyl, haloalkyl, haloalkenyl, haloalkynyl, heteroalkyl, cycloalkyl, cycloalkenyl, heterocycloalkyl, heterocycloalkenyl, aryl, heteroaryl, hydroxy, hydroxyalkyl, alkoxy, alkoxyalkyl, alkoxyaryl, alkoxyheteroaryl, alkenyloxy, alkynyloxy, cycloalkyloxy, cycloalkenyloxy, heterocycloalkyloxy, heterocycloalkenyloxy, aryloxy, heteroaryloxy, arylalkyl, heteroarylalkyl, arylalkyloxy, -amino, alkylamino, acylamino, aminoalkyl, arylamino, sulfonyl, alkylsulfonyl, arylsulfonyl, aminosulfonyl, aminoalkyl, alkoxyalkyl, -COOH, C(O)OR<sup>5</sup>, -COR<sup>5</sup>, -SH, -SR<sup>5</sup>, -OR<sup>6</sup> and acyl;

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m is 0, 1, 2, 3, 4 or 5;

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W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

d) L=L<sup>1</sup>-W-L<sup>2</sup>

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L<sup>1</sup> and L<sup>2</sup> are the same or different and independently selected from C<sub>1</sub>-C<sub>5</sub> alkyl, which may be optionally substituted one or more substituents independently selected from the group consisting of: halogen; =O; =S; -CN; -NO<sub>2</sub>; -CF<sub>3</sub>, -OCF<sub>3</sub>, alkyl, alkoxy, acylamino, alkylamino;

30

W is selected from the group consisting of a single bond, -O-, -S-, -S(O)-, -S(O)<sub>2</sub>-, -N(R<sup>9</sup>)-, -C(O)N(R<sup>9</sup>)-, -SO<sub>2</sub>N(R<sup>9</sup>)-, N(R<sup>9</sup>)C(O)-, N(R<sup>9</sup>)SO<sub>2</sub>-, and -N(R<sup>9</sup>)-C(O)-N(R<sup>10</sup>)-;

R<sup>9</sup> and R<sup>10</sup> are the same or different and are independently selected from H, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>4</sub>-C<sub>9</sub> cycloalkyl, C<sub>4</sub>-C<sub>9</sub> heterocycloalkyl, aryl, heteroaryl, arylalkyl, heteroarylalkyl; and acyl;

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Z is selected from -CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -CH=CH-, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, unsubstituted or substituted with one or more substituents independently selected from the group consisting of C<sub>1</sub>-C<sub>4</sub> alkyl;

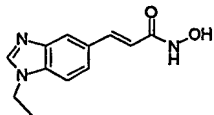
or a pharmaceutically acceptable salt thereof.



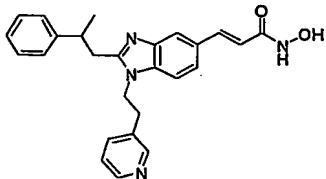
2. A compound of claim 1 wherein Z is -CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, or -CH=CH-, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, and Z is attached at ring position 5 or 6.
3. A compound of claim 1 or 2 wherein Z is -CH=CH-, and is attached at ring position 5.
4. A compound of any one of claims 1 to 3 wherein R<sup>3</sup> = H.
5. A compound of any one of claims 1 to 4 wherein X and Y = H.
6. A compound according to any one of claims 1 to 5 wherein R<sup>4</sup> = H.
7. The compound according to any one of claims 1 to 6 wherein R<sup>1</sup> is selected from the group consisting of: H, hydroxyalkyl, alkyl, arylalkyl, heteroarylalkyl, alkoxyalkyl, aminoalkyl, and heterocycloalkyl, each of which may be unsubstituted or substituted.
8. The compound according to any one of claims 1 to 7 wherein R<sup>1</sup> is selected from the group consisting of: H; methyl; (pyridin-2-yl)methyl; (pyridin-3-yl)methyl; ethyl; 2-hydroxy-ethyl; 2-(pyridin-2-yl)ethyl; 2-(pyridin-3-yl)ethyl; 2-phenyl-ethyl; 2-carboxy-ethyl; 2-(morpholin-4-yl)-ethyl; 2-(piperidin-1-yl)-ethyl; 2-(pyrrolidin-1-yl)-ethyl; 2-diethylamino-ethyl; propyl; 2,3-di-hydroxy-propyl; 3-hydroxy-propyl; 3-methoxy-propyl; 3-isopropoxy-propyl; 2,2-dimethyl-propyl; 3-dimethylamino-propyl; 3-dimethylamino-2,2-dimethyl-propyl; 3-(2-oxo-pyrrolidin-1-yl)-propyl; 3-(morpholin-4-yl)-propyl; 3-(imidazol-1-yl)-propyl; 3-(4-methyl-piperidin-1-yl)-propyl; 3-(pyrrolidin-1-yl)-propyl; 4-dimethylamino-butyl; 5-hydroxy-pentyl; allyl; benzyl; 3,4,5-trimethoxybenzyl.
9. A compound according to any one of claims 1 to 8 wherein R<sup>2</sup> is selected from the group consisting of H, alkyl, arylalkyl, aryl, heteroaryl, heteroalkyl, cycloalkyl, each of which may be unsubstituted or substituted.
10. A compound according to any one of claims 1 to 9 wherein R<sup>2</sup> is: H; methyl; benzylamino-methyl; dibenzylamino-methyl; [2-(4-fluoro-phenyl)-acetylamino]-methyl; [2-(4-methoxy-phenyl)-acetylamino]-methyl; 4-methoxy-benzylamino-methyl; benzyloxy-methyl; phenylacetylamino-methyl; 1-amino-2-phenyl-ethyl; 2-benzylamino-ethyl; 2-(3-methoxy-phenyl)-ethyl; 2-(pyridin-3-yl)ethyl; 2-(2-phenoxyacetylamino)-ethyl; 2-benzenesulphonylamino-ethyl; 2-phenyl-ethyl; isopropyl; 2-phenyl-propyl; 3-phenyl-propyl; 3-phenoxy-propyl; 3-(1H-indol-3-yl)-propyl; 4-methoxy-phenyl; 4-fluoro-phenyl; 4-

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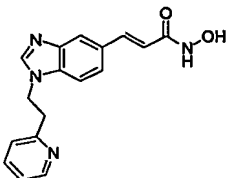
*N*-Hydroxy-3-(1-Ethyl-1*H*-benzimidazol-5-yl)-  
acrylamide



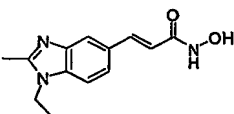
*N*-Hydroxy-3-[2-(2-phenyl-propyl)-1-(2-pyridin-3-  
yl-ethyl)-1*H*-benzimidazol-5-yl]-acrylamide



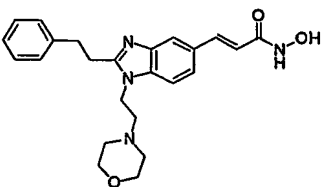
*N*-Hydroxy-3-[1-(2-pyridin-2-yl-ethyl)-1*H*-  
benzimidazol-5-yl]-acrylamide



*N*-Hydroxy-3-(1-Ethyl-2-methyl-1*H*-benzimidazol-  
5-yl)-acrylamide

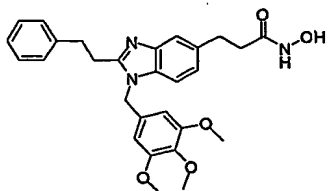


*N*-Hydroxy-3-[1-(2-morpholin-4-yl-ethyl)-2-  
phenethyl-1*H*-benzimidazol-5-yl]-acrylamide

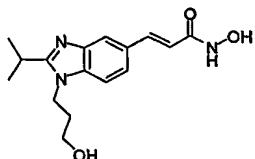


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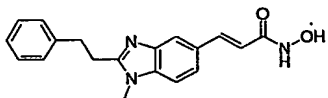
*N*-Hydroxy-3-[2-phenethyl-1-(3,4,5-trimethoxybenzyl)-1*H*-benzimidazol-5-yl]-propionamide



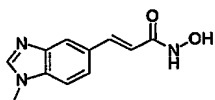
*N*-hydroxy-3-[1-(3-hydroxy-propyl)-2-isopropyl-1*H*-benzimidazol-5-yl]-acrylamide



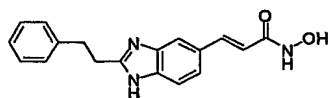
*N*-Hydroxy-3-(1-methyl-2-phenethyl-1*H*-benzimidazol-5-yl)-acrylamide



*N*-Hydroxy-3-(1-methyl-1*H*-benzimidazol-5-yl)-acrylamide



*N*-Hydroxy-3-(2-phenethyl-1*H*-benzimidazol-5-yl)-acrylamide



*N*-Hydroxy-3-(1*H*-benzimidazol-5-yl)-acrylamide

